

## Annex A

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3348	PCT/IL03/00219	20-Dec-02	PF	0.3	Discuss with YF	20-Dec-02
3348	PCT/IL03/00219	20-Dec-02	YF	0.32	Meeting with PF	20-Dec-02
3348	PCT/IL03/00219	22-Dec-02	YF	1.5	Patent preparation	22-Dec-02
3348	PCT/IL03/00219	23-Dec-02	YF	3.6	Patent preparation	23-Dec-02
3348	PCT/IL03/00219	23-Dec-02	YF	1.3	Patent preparation	23-Dec-02
3348	PCT/IL03/00219	24-Dec-02	YF	4	Patent preparation	24-Dec-02
3348	PCT/IL03/00219	24-Dec-02	YF	2.5	Patent preparation	24-Dec-02
3348	PCT/IL03/00219	25-Dec-02	YF	3.1	Patent preparation	25-Dec-02
3348	PCT/IL03/00219	29-Dec-02	YF	0.5	Patent preparation	29-Dec-02
3348	PCT/IL03/00219	09-Jan-03	PF	0.6	Review claim set and comment	09-Jan-03
3348	PCT/IL03/00219	10-Jan-03	YF	1.5	Patent preparation	10-Jan-03
3348	PCT/IL03/00219	12-Jan-03	YF	1.7	Patent preparation	12-Jan-03
3348	PCT/IL03/00219	16-Jan-03	YF	1.5	Patent preparation	16-Jan-03
3348	PCT/IL03/00219	19-Jan-03	YF	2	Patent preparation	19-Jan-03
3348	PCT/IL03/00219	20-Jan-03	YF	3.1	Patent preparation	20-Jan-03
3348	PCT/IL03/00219	22-Jan-03	YF	2	Patent preparation	22-Jan-03
3348	PCT/IL03/00219	23-Jan-03	YF	3	Patent preparation	23-Jan-03

3348	PCT/IL03/00219	26-Jan-03	YF	4.3	Patent preparation	26-Jan-03
3348	PCT/IL03/00219	27-Jan-03	YF	1.82	Patent preparation	27-Jan-03
3348	PCT/IL03/00219	29-Jan-03	PF	0.6	Review Application	29-Jan-03
3348	PCT/IL03/00219	29-Jan-03	YF	3	Patent preparation	29-Jan-03
3348	PCT/IL03/00219	30-Jan-03	YF	3.2	Patent preparation	30-Jan-03
3348	PCT/IL03/00219	02-Feb-03	YF	5.2	Patent preparation	02-Feb-03
3348	PCT/IL03/00219	03-Feb-03	YF	5.5	Patent preparation	03-Feb-03
3348	PCT/IL03/00219	04-Feb-03	YF	1.75	Patent preparation	04-Feb-03
3348	PCT/IL03/00219	11-Feb-03	YF	0.5	Patent preparation	11-Feb-03
3348	PCT/IL03/00219	11-Feb-03	YF	1.25	Patent preparation	11-Feb-03
3348	PCT/IL03/00219	12-Feb-03	YF	1.75	Patent preparation	12-Feb-03
3348	PCT/IL03/00219	13-Feb-03	YF	0.3	Patent preparation	13-Feb-03
3348	PCT/IL03/00219	13-Feb-03	YF	1	Meeting with PF	13-Feb-03
3348	PCT/IL03/00219	13-Feb-03	PF	2.1	Review and discuss with/YF	13-Feb-03
3348	PCT/IL03/00219	16-Feb-03	YF	4.32	Patent preparation	16-Feb-03
3348	PCT/IL03/00219	11-Mar-03	YF	0.3	Meet PF	11-Mar-03
3348	PCT/IL03/00219	11-Mar-03	PF	5.2	Prepare application	11-Mar-03
3348	PCT/IL03/00219	12-Mar-03	YF	1.82	Patent preparation	12-Mar-03
3472	PCT/IL03/00221	13-Mar-03	MF	0.2	Review claims	13-Mar-03
3348	PCT/IL03/00219	13-Mar-03	MF	0.2	Review claims	13-Mar-03

3473	PCT/IL03/00220	13-Mar-03	MF	0.2	Review claims	13-Mar-03
3472	PCT/IL03/00221	13-Mar-03	PF	2	Prepare application	13-Mar-03
3473	PCT/IL03/00220	13-Mar-03	PF	2	Prepare application	13-Mar-03

## **Annex B**

### **SUMMARY OF THE INVENTION**

According to an aspect of some embodiments of the present invention, a hair cutting device contains a heat generator that generates continuous heat of sufficient temperature to cut hair while contacting the skin, but, during the process of cutting hair, is prevented from damaging the skin by controlling the period of time during which heat continuously contacts a given area of skin.

In some embodiments of the present invention, the heat generator continually contacts the skin, but moves about the skin, for example through cyclatory motion and/or vibrations, limiting contact in a given area of skin to prevent skin damage. alternatively or additionally, the heat generator continually contacts the skin and the period of its heat generation is limited to prevent skin damage.

As used herein, a heat generator is defined as a unit containing one or more elements heated to a temperature sufficient to cut hair during a given period of time in which it is in contact with the hair. It should be understood that, in addition to direct current supplied that causes the heat element to provide heat, current may be applied to the element at the line frequency (50-60 Hz), and is to be considered continuous current, since it provides substantially constant heat.

In an exemplary embodiment of the invention, a controller that that controls one or more of heat period and/or the vibration, controls these functions to prevent the heat generator from causing damage to the skin. Said controller, for example, comprising a switch that switches said vibration of said portion on and off. Alternatively or additionally, the controller comprises a switch that switches the vibration of said portion on or off in response to pressure against the skin.

In an exemplary embodiment, the controller comprises at least one motion detector that switches said vibration on or off when said structure is in motion in relation to said skin. alternatively or additionally, the motion detector switches said heat generator on or off when said heat generator is in motion in relation to said skin.

The motion detector, for example, may be a mechanical motion detector, comprising a wheel that rotates against the skin as the hair cutting device is moved along the skin surface. In an exemplary embodiment, said mechanical controller turns the heat generator and/or vibrator on or off in response to motion along the skin.

In an exemplary embodiment, the at least one motion detector comprises an optical motion detector.

In an exemplary embodiment of the present invention, the vibration of the heat generator is provided by a rotating mechanism, for example, that comprises an eccentric rotating weight. In an exemplary embodiment, the rotating eccentric mechanism is coupled to an electric motor. Alternatively or additionally, the rotating eccentric mechanism is coupled to a mechanical motor, for example a motor that winds up. In an exemplary embodiment, the vibrations are caused by movement in the structure and/or heat generator forward and backward; up and down and/or side to side.

In one embodiment of the invention, the motor and/or rotating eccentric mechanism as well as the heat generator, comprise a single unit without any flexibility and/or flexible linkages serving as connections. Alternatively or additionally, the eccentric rotating mass is mounted in relation to the heat generator and are connected to an apparatus structure housing with one or more flexible mountings on said structure. In an exemplary embodiment, the mounting between the heat generator and eccentric rotating mass to the structure of the apparatus is fitted with one or more flexible mounting limiters that limit the amount of motion between these sections of the device. Optionally, the motion limiters comprise one or more restraining pins.

The cutting of a hair is dependent upon the magnitude of heat absorbed by the hair, whether a low temperature over a long period of time or a high temperature over a short period of time, whether pulsed or non-pulsed heat. Hence, the heat generator may generate heat at a lower temperature for a longer period of time or at a higher temperature for a shorter period of time in order to cut hair.

Heat builds in a specific area of a given hair and reaches a sufficient magnitude to cut the hair substantially independent of the hair length. In an exemplary embodiment of the present invention, a single apparatus cuts hair of a variety of lengths, from facial stubble to long hair on the scalp, in a variety of persons. Additionally or alternatively, the present invention allows a single apparatus to cut hair of a variety of lengths on a single person. Further, the heated element used to cut hair, provides a sterile environment through which hair is cut

In some embodiments of the present invention, a heat generator provides heat of sufficient temperature to cause cessation of hair regrowth through destroying a hair growth regulatory mechanism as identified by R. L. Rusting in "Hair - Why it grows, Why it stops", *Scientific American* 248:6 June 2001, pp. 56-63. Alternatively, a heat generator provides heat at

a lower magnitude to cause delay of hair regrowth through partial destruction of a hair growth regulatory mechanism.

According to an aspect of some embodiments of the present invention, a hair cutting device contains a heat generator that comprise at least one wire. Said wire, for example, is positionally adjustable to adjust the position of said wire in relation to said structure.

In an exemplary embodiment, at least one end of said at least one wire is attached to at least one tension generator that provides tension to said wire and said tension generator is positionally adjustable to adjust the position of said wire in relation to said structure.

Alternatively or additionally, at least two tension generators are provided, comprising, for example one or more bars that are perpendicular to the heat generating wire. In an exemplary embodiment, one of the at least two tension generators is attached at least at each end of said at least one wire and one or both tension generators are positionally adjustable to adjust the position of said wire in relation to said structure. Optionally, at least one bar is positionally adjustable to adjust the position of said wire in relation to said structure and, least one wire, for example, is attached to said bar.

Optionally, the bar comprising the tension generator, is connected to a base plate and, for example, the base plate is positionally adjustable to adjust the position of the wire in relation to said structure. Alternatively or additionally, one or more ends of said wire are connected to said base plate. Alternatively or additionally, the base plate comprises one or more tension-providing wheels to which said wire is attached.

In an exemplary embodiment, the positional movements that affect the position of the wire vis-à-vis the structure of the device, can be made in one or more planes for example, transverse, coronal and/or sagittal.

In an exemplary embodiment of the present invention, the heat generator comprises two or more skin depressors that contact the skin surface. Optionally, the two or more skin depressors comprise a flat surface substantially perpendicular to said structure and/or, for example, substantially perpendicular to said heat element. In an exemplary embodiment of the present invention, the one or more skin depressors are designed so that the one or more tension generators do not cause skin damage during cutting. For example, the one or more skin depressors located near the tension generator protrude beyond the tension generator so the skin does not contact the tension generator, thereby preventing buildup of heat and resultant skin damage.

Optionally, the one or more rows of skin depressing elements are provided and, for example, the heat generators are substantially parallel and/or not parallel to said one or more rows of skin depressing elements. Optionally, the skin depressors comprise two or more rows.

According to an aspect of some embodiments of the present invention, a hair cutting device comprises a collection apparatus that collects cut hair, for example, comprising an electrostatically charged bar. Alternatively or additionally, the collection apparatus comprises a brush.

According to an aspect of some embodiments of the present invention, a hair cutting device comprises a deodorant dispenser, for example, that dispenses fluid deodorant and/or solid deodorant. In an exemplary embodiment, the dispenser is adapted to absorb heat by said heat generator and, for example, release deodorant as a result of said application of heat. Alternatively or additionally, the dispenser is adapted to vibrate during motion of said structure and, for example, to release deodorant as a result of said vibration.

In an exemplary embodiment, the one or more elements of the heat generator are held at one or both ends by a tension generator, comprising, for example, a spring loaded mechanism, to tighten the one or more elements of the heat generator during longitudinal expansion that may occur during heat generation. Additionally or alternatively, said tension generator tightens the one or more heat elements to prevent substantial deformation while pressing against hair during hair cutting.

#### **[CLAIM SUMMARY]**

## Annex C

